Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4150/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Saracen Gold Mines Pty Ltd

1.3. Property details

Property: Mining Lease 28/166
Mining Lease 28/245
Mining Lease 31/220
Local Government Area: Shire of Menzies
Colloquial name: Whirling Dervish Stage 3

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
200		Mechanical Removal	Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 March 2011

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard vegetation associations have been mapped at a 1:250,000 scale for the whole of Western Australia. The vegetation of the application area is broadly mapped as Beard vegetation association 20: Low woodland; mulga mixed with *Allocasuarina cristata* and *Eucalyptus* sp. (GIS Database; Shepherd, 2009).

Holm and Associates (2010) conducted a flora survey of the application area between 25 and 28 August 2010, and described the vegetation communities of the application area as follows:

CEAS - Scattered to mid-close acacia tall shrubland with *Casuarina pauper* and/or eucalypt overstoreys over low shrublands dominated by *Acacia burkittii*, with mixed shrubs including *A. tetragonophylla, A. hemiteles, Eremophila metallicorum, Senna artemisioides* subsp. *filifolia* and *Dodanaea rigida*;

CCAS - Scattered to mid-close acacia tall shrublands with *Casuarina pauper* and eucalypt overstoreys over mid-low shrublands dominated by *Acacia burkitti* and *Senna artemisioides* subsp. *filifolia*, with other shrubs including *Ptilotus obovatus*, *Scaevola spinescens*, *Olearia muelleri*, *Eremophila decipiends* and *E. metallicorum*; and

DRXT - Sparse to mid-close eucalypt and mulga woodlands and occasional thickets over open to mid-close shrublands often dominated by *Acacia burkitti* or less commonly *Bursaria occidentalis*. Other common species include *A. hemiteles*, *Senna artemisioides* subsp. *filifolia*, *Grevillea stenobotrya* and *Spartothamnella teucriiflora* (Holm & Associates, 2010).

Clearing Description

Saracen Gold Mines is proposing to clear up to 200 hectares of native vegetation within a 331.77 hectare application area, for the Whirling Dervish Stage 3 project (Saracen Gold Mines, 2010). Vegetation will be cleared for the development of an open pit, waste dump and associated mining infrastructure.

The vegetation will be cleared using a bull dozer and grader or scrapers. The vegetation and topsoil will be stockpiled separately for use in rehabilitation.

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

Comment

The application area is located in the Murchison bioregion of Western Australia and is situated approximately 110 kilometres north-east of Kalgoorlie in the East Murchison subregion (GIS Database).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is not likely to be at variance to this Principle

The application area occurs within the East Murchison subregion of the Murchison Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development (CALM, 2002). The salt-lake systems are associated with the occluded Paleodrainage system (CALM, 2002). The vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and Halosarcia shrublands (CALM, 2002).

The vegetation within the application area consists of Beard vegetation association 20, which is common and widespread throughout the Murchison bioregion with approximately 100% of the pre-European vegetation extent remaining (Shepherd, 2009; GIS Database). A vegetation survey of the application area by Holm and Associates (2010) between 25 and 28 August 2010 identified three vegetation communities. The condition of all vegetation types was classified as 'good' (Keighery, 1994).

A search on the Department of Environment and Conservation Declared Rare and Priority Flora databases revealed that no Declared Rare Flora (DRF) present, however three Priority Flora species may potentially occur within a 20 kilometre radius of the application area (Western Australian Museum, 2011). Holm and Associates (2010) conducted a vegetation and flora survey of the application area between 25 and 28 August 2010. No DRF were recorded within the survey area. No Threatened Ecological Communities or Priority Ecological Communities were recorded or identified within the application area (GIS Database).

The fauna habitats within the application area are considered to be common and widespread within the subregion and faunal assemblages are unlikely to be different to that found in similar habitat located elsewhere in the region (Metcalf and Bamford, 2002). The habitat types are not of high ecological significance and the clearing of 200 hectares of native vegetation is unlikely to have a significant impact in a regional context.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

CALM (2002)
Holm and Associates (2010)
Keighery (1994)
Metcalf and Bamford (2002)
Shepherd (2009)
Western Australian Museum (2011)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European vegetation
- Threatened Ecological Sites Buffered

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal may be at variance to this Principle

No fauna surveys have been conducted over the application area. Metcalf and Bamford (2002) conducted a desktop study and a fauna survey of the Carosue Dam and Safari Bore area, which is reflective of the application area. The survey was conducted between 6 and 10 May 2002.

There are nine species of birds, four mammals, and one reptile listed as either Threatened Species under the *Environmental Protection and Biodiversity Conservation (EPBC) Act 1999* or protected under Western Australian legislation that may potentially occur within the area covered by all Saracen tenements (Holm and Associates, 2006). No protected or threatened bird species recorded within the Birds Australia database have been sighted within Saracen leases or the wider region (Holm and Associates, 2006).

Four of the bird species; Cattle Egret (*Ardea ibis*), Great Egret (*Ardea alba*), Fork-tailed Swift (*Apus pacificus*) and Oriental plover (*Charadrius veredus*) are listed as migratory under the *EPBC Act 1999*. These birds may overfly and be occasional visitors to the application area (with Lake Rebecca seven kilometres north-east), rather than utilising the habitats of the application area on a regular basis. The proposed clearing is not likely to impact critical feeding or breeding habitat for any migratory species. The Peregrine Falcon (*Falco peregrinus*) is likely to be present on Saracen tenements and has been recently sighted elsewhere in the general area. There have been unconfirmed sightings of MalleeFowl (*Leipoa ocellata*) around Carosue Dam with footprints have been found south of the Karari pit and mounds along the access roads during recent fauna surveys (Biologica, 2010; Coffey Environments, 2010). No sightings have been recorded in the application area (Saracen Gold Mines, 2011).

The fauna survey by Metcalf and Bamford (2002) suggested that vertebrate fauna is likely to be typical of a broad area of the East Murchison subregion. According to the survey and aerial photography (GIS Database, Metcalf and Bamford, 2002), the Whirling Dervish survey area contains no breakaways, rocky outcrops, rocky

hilltops or other fauna habitat which may be considered to be significant, and the nearest salt lake (Lake Rebecca) is approximately seven kilometres north-east of the application area. A broad drainage tract passes through the south-eastern part of the application area which may provide fauna refuge and habitat (Metcalf and Bamford, 2002). Saracen Gold Mines (2011) have expressed that this drainage line will be avoided.

There is approximately 100% of the pre-European native vegetation remaining within the Murchison bioregion (Shepherd, 2009; GIS Database). Given the extent of the native vegetation remaining in the local area and bioregion, the vegetation to be cleared does not represent a significant corridor for fauna movement on a local or regional scale.

Based on the above, the proposed clearing may be at variance to this Principle.

Methodology

Biologica (2010)
Coffey Environments (2010)
Holm and Associates (2006)
Metcalf and Bamford (2002)
Saracen Gold Mines (2011)
GIS Database:
- Mulgabbie 1.4m Orthomosaic - Landgate 2003
- IBRA WA (regions - subregions)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposal is not likely to be at variance to this Principle

Searches made on the available GIS Databases reveal that there are no known records of Declared Rare Flora (DRF) existing in the application area (GIS Database).

Holm and Associates (2010) conducted a vegetation and flora survey of the application area between 25 and 28 August 2010. No DRF were recorded within the survey area.

Based on the above, the proposed clearing is not likely to be variance to this Principle.

Methodology

Holm and Associates (2010)
GIS Database:
- Declared Rare and Priority Flora List

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments

Proposal is not at variance to this Principle

A search of the available databases shows that there are no Threatened Ecological Communities (TEC's) within 100 kilometres of the application area (GIS Database).

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology

GIS Database:
- Threatened Ecological Sites Buffered

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments

Proposal is not at variance to this Principle

The application area falls within the Murchison IBRA bioregion (GIS Database). Shepherd (2009) reports that approximately 100% of the pre-European vegetation still exists in this bioregion.

The vegetation within the application area is recorded as Beard vegetation association 20: Low woodland; mulga mixed with *Allocasuarina cristata* and *Eucalyptus* sp. (GIS Database; Shepherd, 2009).

According to Shepherd (2009) approximately 100% of the Beard vegetation association remains within the Murchison bioregion, which is more than the 30% threshold level recommended in the National Objectives Targets for Biodiversity Conservation below which species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000) (see table below).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Murchison	28,120,587	28,120,587	~100	Least Concern	1.06
Beard vegetation associations - State					
20	1,295,103	1,295,103	~100	Least Concern	13.32
Beard vegetation associations - Bioregion					
20	1,174,259	1,174,259	~100	Least Concern	8.89

* Shepherd (2009)
** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology
Department of Natural Resources and Environment (2002)
EPA (2000)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments

Proposal may be at variance to this Principle

According to available databases there is an ephemeral drainage line within the application area (GIS Database). Based on vegetation mapping by Holm and Associates (2010) one vegetation association was found within the application area that is associated with the ephemeral drainage line;

DRXT - Sparse to mid-close eucalypt and mulga woodlands and occasional thickets over open to mid-close shrublands often dominated by *Acacia burkitti* or less commonly *Bursaria occidentalis*. Other common species include *A. hemiteles*, *Senna artemisioides* subsp. *filifolia*, *Grevillea stenobotrya* and *Spartothamnella teucriiflora* (Holm and Associates, 2010).

There is an ephemeral drainage line that intersects the south-eastern corner of the application area, which is lined by the DRXT vegetation type. This vegetation type has been classified as a 'good' condition (Keighery, 1994; Holm and Associates, 2010). Saracen Gold Mines has expressed that the drainage line will be avoided (Saracen Gold Mines, 2011).

Based on the above, the proposed clearing may be at variance to this Principle. However, as the ephemeral drainage line located within the application area is only likely to flow following significant rainfall, the proposed clearing is unlikely to result in any significant impact to any watercourse or wetland provided natural surface water flow patterns are not disturbed.

Methodology
Holm and Associates (2010)
Keighery (1994)
Saracen Gold Mines (2011)
GIS Database:
- Geodata, Lakes
- Hydrography, Linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposal is not likely to be at variance to this Principle

The application area is broadly mapped as the Deadman land system (GIS Database).

The Deadman land system comprises of level to gently undulating plains with little defined drainage apart from sparse broad unchannelled tracts and occasional drainage foci, and minor areas of sandplain (Pringle et al., 1994). This land system is generally not susceptible to soil erosion (Pringle et al., 1994).

The application area is part of a pastoral lease and has been grazed over many years and impacted by mineral

exploration, however, very minor soil erosion was noted by Holm and Associates (2006).

There is an ephemeral drainage line that intersects the application area, however this will be avoided by Saracen Gold Mines (2011) which will mitigate the potential for erosion.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Holm and Associates (2006)
Pringle et al., (1994)
GIS Database:
- Rangeland Land System Mapping

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**
The proposed application area is not located within any conservation areas (GIS Database). The nearest conservation area is Goongarrie National Park, located approximately 59 kilometres south-west of the application area (GIS Database). At this distance, the proposed clearing is unlikely to impact on the environmental values of the Goongarrie National Park.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- DEC Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposal is not likely to be at variance to this Principle**
The available databases show that the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database).

The application area has a groundwater salinity that is hypersaline (ranges from 140,000 milligrams/Litre Total Dissolved solids (TDS) near the surface to 240,000 milligrams/Litre TDS at depth) (Saracen Gold Mines, 2011). This saline or hypersaline groundwater is generally utilised by the mining industry (DoF, 2010). Due to the hypersaline state of the groundwater, the proposed clearing is unlikely to further deteriorate the quality of underground water.

A narrow semi-incised creek line and a broad drainage tract which discharges into Lake Rebecca (approximately seven kilometres north-east of the application area), transects the application area in the south east corner (GIS Database). Saracen Gold Mines (2011) advises that disturbance to these drainage tracts will be avoided, therefore sedimentation of the lake is unlikely.

The application area experiences a semi-arid climate with highly sporadic rainfall and occasional heavy summer rains where the annual pan evaporation rate greatly exceeds the annual rainfall average (BoM, 2011). There is little surface flow during normal seasonal rains (BoM, 2011; Saracen Gold Mines, 2011). The proposed clearing is not likely to cause the quality of surface water to deteriorate.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BoM (2011)
DoF (2010)
Saracen Gold Mines (2011)
GIS Database:
- Public Drinking Water Source Areas
- Hydrography, Linear
- Groundwater Salinity, Statewide

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposal is not likely to be at variance to this Principle**
The application area experiences a semi-arid climate with an average annual rainfall of 250 millimetres recorded at the closest weather station at Edjudina, approximately 35 kilometres away south of the application area (BoM, 2011; GIS Database). The application area experiences a relatively high average annual evaporation rate of approximately 2,400 millimetres (BoM, 2011).

The application area is within the Raeside-Ponton catchment area (GIS Database). The size of the area to be cleared (200 hectares) compared to the size of the catchment area (11,589,533 hectares) (GIS Database) is not

likely to increase the potential for flooding within the application area, local area, or within the catchment.

Surface water flow in the application area is predominantly sheet flow in an easterly direction towards an ephemeral drainage line in the south-east section of the application area. This ephemeral drainage line joins a major drainage line that eventually discharges into Lake Rebecca (GIS Database; Saracen Gold Mines, 2011). The broad drainage line consists of several semi-incised channels in a broad flood zone; however the channels within the draining line only contain water after rainfall (Saracen Gold Mines, 2011). Sheet flow has been disrupted by existing infrastructure and is currently diverted to the north around the existing infrastructure. Where impacts to sheet flow are unavoidable, it will redirected away from the mine area and potentially contaminated runoff will be contained (Saracen Gold Mines, 2011). Saracen Gold Mines (2011) advises that whole area floods only after major, but infrequent rainfall and the size of the application area is minimal in relation to the total size of the Lake Rebecca catchment.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

BoM (2011)
Saracen Gold Mines (2011)
GIS Database:
- Geodata, Lakes
- Hydrographic Catchments - Catchments
- Hydrography, Linear

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

The clearing permit application was advertised on 7 February 2011 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received in relation to this application regarding Aboriginal heritage issues. A written response was provided on the matters raised.

There are no Native Title claims over the area under application. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993.*

There are three registered Aboriginal Sites of Significance within the application area (site IDs: 16805 and 16806) (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment and Conservation and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Methodology

GIS Database:
- Aboriginal Sites of Significance
- Native Title Determined
- Native Title Federal
- Native Title NNTT

4. References

Biologica (2010) Level 1 Survey for a Proposed Pipeline from GCT to Carosue Dam and Power line from Black Swan to Carosue Dam, Unpublished report prepared for AngloGold Shanti Australia and Saracen.

BoM (2011) Climate Statistics for Australian Locations. A Search for Climate Statistics for Edjudina, Australian Government Bureau of Meteorology, viewed 18 February 2011, <http://www.bom.gov.au/climate>.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Murchison 1 (MUR1 - East Murchison subregion) Department of Conservation and Land Management, Western Australia.

Coffey Environments (2010) Level 1 Vertebrate Fauna Survey for the Carosue Dam Project Saracen Gold, Report Prepared for Saracen Gold Mines Pty Ltd. Appended.

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

DoF (2010) Aquaculture Groundwater Resource Atlas, Goldfields, Department of Fisheries, viewed 17 February 2011, <http://www.fish.wa.gov.au/docs/pub/AquaGroundWater/goldfields.php?00>.

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.

Holm, A., and Associates (2006) Environmental Impact Assessment and Environmental Management Commitments and Procedures, Report for Saracen Gold Mines Pty Ltd, Western Australia.

Holm, A., and Associates (2010) Proposed Expansion of Whirling Dervish Mine, Report for Saracen Gold Mines Pty Ltd, Western Australia.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Metcalf, C. and Bamford, M (2002) Vertebrate fauna of the proposed Carosue Dam ? Safari haul road. Report for Sons of Gwalia Ltd, Perth, Western Australia.
Pringle, H.J.R., Van Vreeswyk, A.M.E., and Gilligan, S.A. (1994) An Inventory and Condition Survey of the North-Eastern Goldfields, Western Australia, Department of Agriculture, Western Australia.
Saracen Gold Mines (2011) Clearing application supporting information - Whirling Dervish Stage 3, Unpublished report dated January 2011.
Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
Western Australian Museum (2011) Nature Map, Department of Environment and Conservation, viewed 21 February, 2011, <http://www.museum.wa.gov.au/research/databases/nature-map>.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

P1	**Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P2	**Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P3	**Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
P4	**Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
R	**Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
X	**Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1	**Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
Schedule 2	**Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
Schedule 3	**Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
Schedule 4	**Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna.* Department of Conservation and Land Management, Como, Western Australia} :-

P1	**Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
P2	**Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
P3	**Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
P4	**Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
P5	**Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)*

EX	**Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
EX(W)	**Extinct in the wild:** A native species which: (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CR	**Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
EN	**Endangered:** A native species which: (a) is not critically endangered; and (b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
VU	**Vulnerable:** A native species which: (a) is not critically endangered or endangered; and (b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	**Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.